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FOREST ENTOMOLOGY BRIEF 22 (REVISED)

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HOW TO PROTECT ROSEBUSHES FROM THE ROSE APHIS.

Evidence of Infestation.- Throughout the growing season young growth of rosebushes may be found covered with **small green or pinkish aphids**, known as the rose aphis, which suck the sap and cause an **unhealthy, curled condition of the foliage and deterioration** in the quantity and quality of the flowers.

The **presence of ants** on rosebushes is an indication that the aphid is present. The ants collect the honeydew from the aphids and, to a certain extent, protect them from their insect enemies.

Habits and Seasonal History.- The rose aphis passes the winter in the egg stage on rosebushes. The insects hatching from these eggs reach maturity in about 15 to 20 days, all being wingless females. They are pear-shaped and either bright green or pinkish in color. When mature they begin to produce living young, each individual in course of about 20 days producing 50 to 100 young females which, on maturity, are either winged or wingless and in turn either green or pinkish. The winged ones fly to other rosebushes to start fresh colonies. In favorable, especially humid weather conditions many generations thus follow one another, covering the succulent vegetation on the rosebush with their bodies. The last generation of the season consists of males as well as females, the latter depositing the eggs which overwinter, thus completing the life cycle for the year. It can easily be seen that, if every aphid produced in the course of a season lives its full life, the progeny of a single overwintering egg would run into millions.

Natural Control Agencies.- Hot, dry weather causes aphids suddenly to disappear. Likewise, driving rains, winds and particularly predaceous insects, like ladybirds, and internal parasites, under favorable conditions, decimate their numbers considerably. These agencies, however, are intermittent and their help often comes too late to save the crop of bloom, so that it is always advisable to apply remedies as soon as aphids are discovered.

The **standard remedy** for the rose aphis at present is **40 per cent nicotine sulphate** (a liquid procurable in most seed stores) prepared as follows: **For each gallon of water use one teaspoonful of the nicotine, add a half ounce of laundry soap** and spray the bushes with the mixture. For larger quantities follow directions printed on containers.

One spraying is usually 100 per cent effective, but if the first application has not been thoroughly done, a second one may be necessary.

Spray in the morning to permit early drying and prevent the possible development of mildew.

The spraying device to be used depends on the amount of spraying necessary. A cheap atomizer, such as can be bought in any seed store, is quite satisfactory for small plants and gardens. Good knapsack and barrel pumps are available for commercial growers.

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